

ERIC PROJECT

A STUDY OF SOCIAL COHESION IN ELEMENTARY
TEACHER TRAINING INSTITUTIONS AND ITS
RELATIONSHIP WITH THEIR EFFICIENCY

N. K. JANGRA

Seal

DEPARTMENT OF TEACHER EDUCATION
National Council of Educational Research & Training
Sri Aurobindo Marg : New Delhi - 110016.

1982

A B S T R A C T

Institutions have an organization of their own, educational institutions being no exception to it. In organizations efforts of each of the individual and various groups are coordinated in a way that they contribute to the productivity of the organizations. Human organisations have complex interactions in the group which produce cohesiveness. It is interesting to study how this cohesiveness in the organisations, teacher training institutions in this case, affects institutional efficiency. The present study conducted by Dr. P.N. Jangir, Reader in the Department of Teacher Education and supported by ERIC investigates into the relationship between social cohesion amongst teacher educators in elementary teacher training institutions and their efficiency in terms of student teacher outcomes. The study, though confining to only one state, provides trends of relationships between the variables of social cohesion, student teacher attitudes and adjustment. The trend shows significant correlations between the criterion variables and student teacher achievement in theory and practice. The data has been analysed employing correlational, inferential and predictive

statistical procedures. It opens up a new area of research wherein microstudies can provide empirical data for improving effectiveness of the teacher training institution as an organization.

It is hoped that the study will attract attention of the researchers working in this area of educational research as well as practioners in teacher education. The purpose of the study will be achieved, if more research in this area is conducted.

N.C.E.R.T.
New Delhi.

November 26, 1982.

A.C. Das
Head of the Department
Deptt. of Teacher Education

P R E F A C E

Teaching is an activity which is carried on in an environment. Classroom environment is considered to be a part of classroom teaching. The classroom itself is located in the institution which has an environment of its own. The institutional environment, besides physical setting, is determined by the interaction among staff members. The human relations and a series of interactions build up the social climate in the classroom. The quality of the social climate in the institution is built up through what has been termed as social cohesion-- a cementing force arising out of the interpersonal attraction amongst teachers. The quality of social cohesion obtaining in educational institutions is also determined by the leadership style of the Head and the attractiveness of the institutional goals. This context variable affects pupil outcomes which is an index of teaching effectiveness.

The study of the context variable of social cohesion appears to be quite important since it is likely to affect classroom transactions, and as a consequence pupil learning outcomes. There are few studies available on this variable in the context of educational settings, though a large number of studies have been carried out in the context of industrial management,

defence establishments and commercial organisations. The studies in the teacher training institutions are almost conspicuous by their absence. The present study conducted provides a beginning for further exploration of this important area of educational research. The study has not been able to provide conclusive findings, but it does point to some trends. For example, social cohesion measures have been found to be related to student teacher achievement in theory as well as practice. These variables, however, are not significantly correlated with student teacher attitudes and adjustment except in a couple of areas. Social cohesion scores have also been found to be strong predictors of student teacher achievement in practice teaching, but weak predictors of achievement in theory. The trend, however, is that social cohesion scores do have relationship with student teacher achievement. Probably, research linking the context variable of social cohesion, process variable of teacher behaviour and product variable of student teacher outcomes will throw further light on the problem. The area is promising, particularly, from the viewpoint of management of Educational Institutions.

Several persons have been associated with the study at different stages. Mrs. R.K. Chonra, Lecturer helped in preparing the LCAI and scoring a part. Mrs. Sukhmi Yadav assisted in scoring and tabulation of data. Mrs. Bomi Dutta shared her data relating to student teacher attitudes and adjustment from the institutions which were common in the present study and her own study. This enriched the present and made the findings more meaningful. I feel indebted to all the three in completing the study. The MDC Secretariate provided the necessary financial support for the study.

Lastly, I owe gratitude to Mrs. Menakshi Sharma, Mr. I.J. Chauhan, Miss Anita Jain and Mr. Raj Roon for the secretarial assistance they provided at different stage of the study.

Department of Teacher Education
NCERT, New Delhi.

November 2, 1982.

(N.K. Jangira) (Dr.)
Reader in Education

THE PROBLEM FOCUS

1.0 Backdrop

1.1 Since times immemorial, probably right from the inception of human civilization, individuals have learnt to function in groups. Why human beings alone, even animals have the tendency to function in groups. The ants provide a excellent example of group behaviour. They all combine together to organize a corporate life for meeting the necessities of life. The threat to one brings sympathy and defence from the rest of the species. This is true of most of the species of life, humans being no exception to it.

1.2 A cursory examination of the human behaviour reveals his social instinct. Even in the competitive society of today based on a high level of individualized orientation one can observe that most of our time is spent in groups. In the family one can discern a group where members have a close affinity directed towards family goals. In the school, one can observe a number of groups-an instructional group in the class, a play group on the field, a dramatic group on the stage, a literary group in the literary society, a science group in the laboratory, and so on.

Professional groups function in the office, in institutions, in industrial organisations and business establishments. In the community one can find a religious group, voluntary organisations for social work and a variety of recreational and intellectual forums.

Evidently, if a man's day is surveyed, one would find that a major portion of his time is spent in one group or the other. That is why group dynamics is receiving more and more attention in recent years.

Why do people function in groups? How do people select a group for membership? What is the force that binds people together in a particular groups? Does this binding force correlate with and result in group productivity? These are some of the pertinent questions in search of answers. The answers to these questions would provide Direction for improving the functional effectiveness of groups.

1.3 Group comprises a number of similar people who interact amongst themselves. A simple group with which everyone is familiar refers to the family. Here the similarity is in terms of the shared heredity and environment as well as common family goals. The similarity can also be visualized in terms of people belonging to different ethnic groups or even within the same ethnic group which goes beyond the confines

of the family. In this case, besides the common goal orientation which is the basic essential of a group, the members have some kind of attraction amongst them. It implies that the primary purpose for which a member joins a group is his need and the extent to which he perceives the potentiality of the group goals to satisfy his need. Simultaneously, he also considers other members and his own going-alongness with them. This going-alongness, besides the commonality of the goals, also depends upon the attractability he perceives in other group members. This characteristic is considered to^{be} the cementing force in the group and is termed as cohesiveness.

1.4 Cohesiveness of the group has been defined by English and English (1958; in ^{the} Dictionary of Psychological and psychoanalytical Terms it as the over-all attraction of ^{the} group for each of its members. In the Dictionary of Social Sciences, Festinger (1980) considers it as a group feeling which is based on togetherness. Gould and Kalb (1967) visualise it as the motivation of an individual to maintain its membership in a group. International Encyclopedia of Social Science (1968) considers "Social cohesion as the cement drawing and binding individuals to-gether into groups". Cartwright and Zander (1963) also reflect this line of thinking.

1.5 One common denominator in different definitions of social cohesion refers to the mutual attraction among group members. What can be the overt behaviours representing this interpersonal attraction among the members? Five categories of these behaviours catalogued in Cartwright and Zander (1968) are: a) interpersonal attraction among group members; b) evaluation of the group as a whole by the individual member; c) closeness with the group; d) expressed desire to remain in the group; and e) perception of the style of leadership and opportunity to participate in the decision making process. Viewed in the context of educational institutions social cohesion implies interpersonal attraction among the staff members manning the institutions evaluation of the institution as a composite entity; identification of the member of staff with the institution; expressed desire to remain in the institution and perception of leadership style alongwith decision making process obtaining in the institution as perceived by the members of staff. This operational definition of social cohesion appears to be quite reasonable to work on.

1.6 The concept of social cohesion emerging from the operational definition when analysed yields several implications. The groups are likely to vary in terms of social cohesion depending on the degree of interpersonal attraction obtaining in the group. The variation in social cohesiveness is likely to affect the realization of group goals which can also be termed as group productivity. There may be several other determinants of group productivity, but social cohesion is likely to turn out to be a potential determinant.

1.7 Looking back it was in early twentieth century that psychological research sets its sight on the improvement of workers' efficiency and discipline. The attempt originated with the orientation termed as scientific management (Tayler, 1911). Sometimes in 1930 the scope was enhanced to encompass the social component in production setting. Against this background, research in the area of social cohesion assume a good deal of practical significance. Initial work suggests that cohesiveness can be helpful in work groups. It was discovered that workers in cohesive group generally display high level of morale and satisfaction with their job (Marquis, 1951

Gross, 1954; Exline, 1957): Cohesiveness, it was found, also increases members' sense of security with improved self regard. They feel less nervous. The reason may be the mutual support the group members provide to each other (Seashore, 1954). The workers in high cohesive groups tend to score higher on the measures of self esteem and feel free to report even embarrassing events to others in the group (Julian, 1960) and express their emotions unhesitatingly (French, 1941 and Pepitone, 1955). Another factor associated with the high level of social cohesion in the group refers to absences. It has been found that members in the high cohesive group have less absences in the group than those with low cohesion (Fox and Scott, 1943).

1.8 The increased morale, self esteem and job satisfaction in cohesive groups obviously raised another question of practical significance. Does social cohesion affect production in the establishment? Does improved social cohesion in the work group increase production? On the face of it, people appear to do better work in the positive atmosphere of the cohesive group, because they expect their peers to exhibit approval for their efforts (Secks, 1952). Studies of job proficiency indicate that people do better work amidst friends rather than strangers (Husband, 1940).

Army units are comparatively more efficient at reconnaissance tasks when they are high in cohesiveness (Goodacre, 1951). Probably, high performance may be the outcome of increased co-operation (Haythorn, 1953) and with high level of communication featuring the cohesive group (Lott and Lott, 1961).

1.9 Human relations research also provides evidence for better productivity in terms of adjustment, self concept/self esteem, morale, job satisfaction and production. The exception is when the effect of cohesiveness is marred by what has been termed as groupthink (Janis, 1968). Groupthink is a way of thinking in which a cohesive groups need for unanimity overwhelms the members' realistic appraisal of alternative courses of action (Gergen and Gergen, 1981). Group members feel reluctant to criticise their friend's idea. They have the tendency to fit in with the group and keep the group feeling flowing through conformity (Brand Statter, 1978; Schulz and Pelzer, 1978).

1.10 In the context of educational institutions several questions relating to social cohesiveness arise. Can the concept of social cohesion developed in the context of noneducational groups be applied to educational groups? For example, can we study social cohesion in the educational institutions? If yes, to what objectives?

The answers to these questions appear to be in the affirmative as a number of concepts developed in psychology in general and social psychology in particular in non-educational settings have been us fully employed in education. Group dynamics, learning theories and a lot more from psychology have provided guiding principles for instructional methodology and management of educational institution as an organization. Classroom has also been visualized as a social system (Tholan, 1969).

1.11 Social cohesion according to the definition arrived at elsewhere in this section envisages interpersonal attraction in the group called education faculty. It comprises interpersonal behaviours emerging from interpersonal perceptions and perceptions of the leadership and decision making process. Following analogy from other fields higher level of social cohesion should be accompanied by higher level of motivation in the teachers, higher level of job satisfaction, higher level of self-esteem and higher level of morale. They may also involve high level of task involvement in the institution. As is well known, the major task before the teacher is instructional. With his better input in terms of task involvement, it is likely that the pupils would exhibit better outcomes in terms of achievement, adjustment, attitudes, and so on.

But the question is whether this logico-deductive theoretical position is supported by the empirical evidence as well.

1.12 The studies in the educational institutions employing this context of social cohesion directly aiming at the specific goal cited above are consciousness^{by} their absence (Buch, 1974, 1979). However, studies using organizational climate index are available. The relationship between the organizational climate obtaining in the educational institutions and pupil outcome is rather inconclusive. The studies have yielded mixed results (Ghannam, 1979). The only study using the concept of social cohesiveness in the context of educational institutions conducted in India is at the doctoral level (Babu, 1976). The study purported to investigate the level of social cohesion obtaining in higher secondary schools. The product moment correlation between cohesiveness and job satisfaction of teachers were found to be significant. Linguistic affiliations were somewhat related to group cohesiveness. Group cohesiveness and worries/anxieties related to job were not found to be related. At the teacher training level, the only study in this area investigated relationship between social cohesion in the secondary colleges of education and student teacher attitudes.

The product-moment correlation between the two variables were significant only in respect of the subscores of student teachers' attitude towards classroom teaching, pupil centred teaching, educational process and student teacher attitude towards pupils (Dhaka, 1981). At the elementary teacher education level, no study could be located. It was, therefore, considered desirable that a study of social cohesion in the teacher training institutions at the elementary level in relation to student teacher outcomes may be designed. The present study is an attempt in this direction.

2.0 Problem Statement

2.1 The problem was stated as:

A STUDY OF SOCIAL COHESION IN ELEMENTARY TEACHER
TRAINING INSTITUTIONS AND ITS RELATIONSHIP WITH
THEIR EFFICIENCY.

Obviously, the study uses two terms relating to two variables. Social cohesion is a social force arising from the interpersonal attraction of the group members. The behaviours are classified into five categories, namely, interpersonal attraction, evaluation of the group as a whole by the individual, closeness with the group, express desire to remain in the group and leadership and decision making process, perception. Social cohesion has been

studied both as a composite summative variable as well as its five constituent component variables. Efficiency of the institution technically covers a large number of such components as student outcomes, the level of wastage and stagnation, cost effectiveness, etc. In this particular study, however, the student outcomes have been selected as the criterion of institutional efficiency for the obvious reason that it is the core vital objective of teacher education. To that extent, the term has been used in a limited sense. The pupil outcomes also comprise several dimensions like achievement, adjustment and attitude. The study started with only student teacher achievement in theory and practice teaching as the product variable, but the later effective variables were also added later on due to the availability of the 'data' from another study (Dutta, 1982). The data were pooled for carrying out multivariate analysis involving regression analysis.

The achievement has been studied along several dimensions. Theory coursewise (pedagogical papers) and practice teaching course have been treated separately. The total achievement in theory has also been covered. The adjustment of student-teachers covered their adjustment to teaching, teachers, peers and institution. The total adjustment has also been studied. Student teacher

attitudes cover the six dimensions of the Ahluwalia Attitude Inventory namely attitude towards teaching profession, attitude towards classroom teaching, attitude towards child centred practices, attitude towards educational process, attitude towards pupil and attitude towards teachers.

In addition their

attitude towards the institution was studied.

- 2.3 The study was primarily designed following correlational approach. It purported to answer a simple question whether social cohesion of elementary teacher training institutions is related to student teacher outcomes. Besides, a few more questions were considered for seeking answers through the study. Do institutions with high and low social cohesion differ significantly on student teacher outcomes? Does social cohesion predict student outcomes or vice versa. The study focussed on the question through comparing student teacher outcome means of the teacher training institutions with high and low social cohesion, and application of stepwise regression analysis for the prediction of criterion variables. Several combinations of the predictor and criterion variables have been considered for processing data. Prediction of social cohesion from achievement, adjustment and attitude variables; prediction of

achievement from social cohesion, attitude and adjustment scores, and practice teaching scores from the rest of the variables.

- 2.4 The study was conducted in the state of Uttar Pradesh, which has 125 elementary teacher training institutions running two years course. Final year students were selected for the study as it was considered that they might have formed stable perceptions of the social cohesion in the institutional staff and their exposure to social forces in this institution might be reflected in their behaviours.

3.0 Objectives

- 3.1 The following specific objectives of the present study emerged from the statement of the problem.
- 3.1.1 To study the social cohesion obtaining in the elementary teacher training institutions.
- 3.1.2 To study the relationship between sets of social cohesion scores (total and on the five areas) and the scores of student teachers on achievement, adjustment and attitudes.
- 3.1.3 To compare the mean scores for student teachers in institutions with high and low social cohesion on achievement, adjustment and attitude.
- 3.1.4 To predict social cohesion in elementary teacher

training institutions through different variables comprising achievement, adjustment and attitudes.

3.1.5 To predict achievement from different social cohesion scores and student teacher adjustment, attitude and socio-economic status scores.

3.1.6 To predict teaching practice scores of student teachers from different social cohesion scores and student teacher pedagogical achievement, attitude, adjustment and socioeconomic status scores.

4.0 Hypotheses

4.1 In order to realize the objectives (3.1.2 and 3.1.3) the following null hypotheses were formulated:

H₁ The mean social cohesion scores of the teacher training institutions are not significantly related to the mean institutional scores on student teacher achievement, attitude, and adjustment.

H₂ The difference between the mean scores of institutions with high and low social cohesion on student teachers' achievement do not differ significantly.

H₃ The difference between the mean score of institutions with high and low social cohesion on student teachers' adjustment do not differ significantly.

H₄ The difference between the mean score of institutions with high and low social cohesion on student teachers' attitude do not differ significantly.

5.0 Statement of Hypotheses

5.1 The four hypotheses have been formulated . null hypotheses as supporting evidence required for formulating the directional hypotheses is not available. The social cohesion in the context of educational institutions is practically an unexplored area and prediction objective 3.1.1 is descriptive in nature. The objectives 3.1.4, 3.1.5 and 3.1.6 relate to prediction.

6.0 Delimitation

6.1 The study has ramifications in several directions. Considering the constraints of time and resources, it was limited in terms of the level of teacher education, geographical area, institutions, variables selected for the study.

5.2 The study was confined to elementary teacher education level. In terms of geographical area, the study was confined to only Uttar Pradesh. Further, it was confined to the institutional efficiency variable of student teacher outcomes in respect of achievement, adjustment and attitudes. Practice teaching was also covered. These variables were set in the focus of the study, since they constitute the major concern of teacher education and represent its qualitative dimension.

therefore developed specifically for this purpose. The developmental steps and technical information regarding SCAI follows.

4.1.2 Considering the operational definition of social cohesion in the context of educational institution draft items were prepared in each of the component areas. These draft items were examined by a panel of experts regarding their clarity and belongingness to the area for which they were constructed. The table-2.1 provides areawise draft items:-

Table 2.1
Areawise Draft Items

Area	No. of Items.
I. Interpersonal Attraction among group members,	12
II. Evaluation of the group as a whole by the individual member,	15
III. Closeness with the group.	10
IV. Express desire to remain in the group.	10
V. Style of leadership and opportunity to participate in Decision making process.	15
Total	62

4.1.3 The draft items included check items as well as positive items. The check items were classified as negative items. The items were answered by the teacher educators with a view to judging social cohesion in their institutions. The items had three situations for categorization of the respondent judgements, namely,

बहुत बार ऐसा ही
होता है

कभी कभी ऐसा
अनुभव होता है

कभी भी ऐसा
अनुभव नहीं होता

☐
☐
☐

Mostly happens
like this.

Sometimes happens
like this.

Never happens
like this.

For each of the situations separate blocks were provided. The answers were tick marked () in relevant block. Some sample items are given below:-

1- इस विद्यालय से मुझे
लगाव सा हो गया है ।

I have started liking
this institution.

☐
☐
☐

2- मेरे साथी अध्यापक मेरे
हितों का ध्यान नहीं रखते ।

My colleagues do not bother
about my welfare.

☐
☐
☐

4.1.4 The tool comprising 62 items was tried out on 200 elementary teacher educators of states of Madhya Pradesh, Uttar Pradesh, Himachal Pradesh, Rajasthan, Punjab and

Delhi. The items were scored and item-item product moment correlation matrix was prepared. Correlation between item score and the total score were also obtained. Fifty items having significant correlation with the total score, ten in each area, were selected.

Reliability: 4.1.5 Cronbach Alpha was calculated for the tool as a whole and for the five areas separately. The Alpha values serving as reliability coefficients are given in table 2.2.

Table 2.2 Cronbach alpha Reliability Co-efficients for SCAT.

S.No.	Area	Alpha value
1.	Interpersonal attraction among group members.	.59227
2.	Evaluation of the group as a whole	.80469
3.	Identification with the group.	.49294
4.	Express desire to remain in the group.	.51174
5.	Style of leadership and opportunity to participate in decision making process.	.54803
Total		.89420

The content validity was established through expert judgement. The tool is internally valid, since the correlation between the item scores and the total score are significant.

4.2.0 Student Teacher Adjustment Inventory (STAI)

4.2.1 The tool has been developed by Dutt (1980, in press). The tool comprises 70 items divided in four areas of adjustment namely adjustment towards teaching, peers, teachers and institutions. The reliability using Kuder Richardson-20 comes out to be .89 for the total inventory and .68, .74, .74 and .69 for the areas relating to teaching, peer, teacher and institution respectively.

4.3.0 Teacher Attitude Inventory (TAI)

4.3.1 The tool consists of 30 items and covers six areas of attitude, namely, teaching profession, classroom teaching, child centred practices, educational process, pupils and teachers. The test retest reliability was found to be 0.79.

4.4.0 Attitude Toward Institutions Inventory

4.4.1 The attitude inventory at 4.3.0 does not cover teachers attitude towards the institution so the tool developed by Dutt (1981) was used for this purpose. The reliability of the tool using Cronbach Alpha comes to.

4.5.0 Student Teacher Achievement Proforma

4.5.1 The proforma was developed to collect student teacher marks obtained in theory papers as

ANALYSIS AND INTERPRETATION

=====

1.0 Approach

1.1 It will be recalled that the study purported to focus on the relationship between social cohesion obtaining in the elementary teacher training institutions sampled for the purpose with different measures of student teacher achievement, adjustment and attitude. The institutions with high and low social cohesion were also to be compared on the criterion variables. Further, an attempt was made to predict achievement from the social cohesion scores and social cohesion was predicted from product variables, SES and adjustment and attitude of student teachers. The first objective is more or less a descriptive study of intercorrelations amongst different variables. Hypotheses for testing the significance of difference of means were formulated for the second objective. The last one is a combination of descriptive and inferential treatment of the data using stepwise regression analysis.

1.2 Although statistical procedures to be used for realising the objectives of study through analysis and

interpretation of the data were mentioned in the preceding chapter, here it will be appropriate to enumerate all variables used in the analysis and interpretation. It will be helpful in reading through the tables meaningfully. The table below catalogues the variables alongwith their code numbers used in computerization of the data.

contd:-

Table 3.1
Variables with Computerisation Codes

Area	Computer Code	Variable (abbreviated Form)	Variable (expanded form)
SOCIAL COHESION	01	IPA	Interpersonal attraction among group members.
	02	EGW	Evaluation of the group as a whole by the member.
	03	CWG	Closeness with the group.
	04	EDRG	Express desire to remain in the group.
	05	LSDM	Leadership style and decision making.
	06	3CST	Total social cohesion score.
ACHIEVEMENT	07	PE	Principles of Education.
	08	EP	Educational Psychology
	09	PT	Principles of Teaching.
	10	EEC	Educational Evaluation and Counselling.
	11	IFE	Problems of Primary Education.
	25	ATT	Achievement Theory Total.
	12	FTT	Practice Teaching Total.

Area	Computer Code	Variable (Abbreviated)	Variable (Expanded form)
ADJUSTMENT	13	ADI	Adjustment to Teaching.
	14	ADF	Adjustment to Peers
	15	ADTR	Adjustment to Teachers
	16	ADI	Adjustment to Institution.
	26	ADTS	Adjustment Total Score.
Socio-Economic Status	17	SES	Socio-Economic Status
ATTITUDE	18	ATF	Attitude towards Teaching Profession.
	19	ACT	Attitude towards Classroom Teaching.
	20	ACCP	Attitude towards Child Centred Practice.
	21	ALF	Attitude towards educational process.
	22	AP	Attitude towards pupil.
	23	ATR	Attitude towards Teachers.
	27	ATS	Attitude total Score.
	24	ATI	* Attitude towards Institutions.

* The scores are not added to ATS Computer Code 27 because has been measured from a different tool.

The computer codes and variable - specifications will help in reading the tables giving statistical treatment to the data that is to follow.

2-0 Results: Correlational

2.1 The first analysis of the data was correlational. It provided a birds eyeview of the intercorrelations amongst different variables. The table 3.2 provides 11x7 intercorrelation matrix. The tabulated values of correlations significant at .05 and .01 levels are .332 and .433 respectively. The intercorrelations in the table will have to be studied in the light of these tabulated values,

contd:-

Variables	Social Cohesion					T
	1	2	3	4	5	6
1.	1.000	-	-	-	-	-
2.	.815**	1.000	-	-	-	-
3.	.760**	.633**	1.000	-	-	-
4.	.764**	.660**	.696**	.999	-	-
5.	.873**	.805**	.747**	.753**	1.000	-
6.	.938**	.866**	.867**	.858**	.940**	1.000
7.	.364*	.318*	.149*	.313	.363*	.333*
8.	.200	.151	.163	.202	.014	.154
9.	.216	.275	.140	.098	.141	.118
10.	.306	.470**	.078	.213*	.346	.308
11.	.230	.281	.111	.189	.245	.232
25.	.481**	.565**	.122	.364*	.403**	.418*
12.	.405*	.321	.371*	.522**	.368*	.445**
13.	.257	.161	.308	.074	.185	.225
14.	-.039	-.010	.045	-.098	.062	-.000
15.	-.252	-.293	-.100	-.108	-.168	-.200
16.	-.062	-.095	-.096	-.062	-.077	-.080
26.	-.012	-.057	.066	-.053	.022	-.004
17.	.028	.044	-.033	.273	.017	.063
18.	.057	.008	.105	-.019	.085	.059
19.	-.123	-.101	.023	-.138	-.007	-.067
20.	-.060	-.107	.057	-.002	.072	.018
21.	-.167	-.110	-.074	-.045	-.016	-.087
22.	-.023	.002	.069	.029	.136	.056
23.	.015	.066	.195	.138	.121	.152
27.	-.049	-.026	.074	-.011	.090	.026
24.	-.065	-.032	.029	-.049	.045	-.009

contd:

Vari- ables	Achievement						T	P.A.	SES
	7	8	9	10	11	25	12	17	
1.	-	-	-	-	-	-	-	-	
2.	-	-	-	-	-	-	-	-	
3.	-	-	-	-	-	-	-	-	
4.	-	-	-	-	-	-	-	-	
5.	-	-	-	-	-	-	-	-	
6.	-	-	-	-	-	-	-	-	
7.	1.000	-	-	-	-	-	-	-	
8.	.048	1.000	-	-	-	-	-	-	
9.	.031	-.111	-	-	-	-	-	-	
10.	.072	-.219**	.563	.999	-	-	-	-	
11.	.177	-.118	.207	.271	.999	-	-	-	
25.	.393*	.200	.691	.698**	.608**	1.0	-	-	
122	.117	.159	-.016	-.010	-.226	-.013	1.000	-	
13.	.274	.063	-.032	.015	.284	.204	-.321	-	
14.	.153	-.263	-.016	-.005	-.061	-.100	-.303	-	
15.	-.083	-.054	-.087	-.091	.044	-.097	-.343*	-	
16.	-.059	.015	.222	.027	.216	.179	-.224	-	
26.	-.103	-.073	.014	-.016	.138	.054	-.363*	-	
17.	.129	.419*	-.043	-.157	.156	.166	-.347*	.999	
18.	.106	-.152	.103	-.093	.189	.050	-.414**	.332	
19.	-.147	-.230	-.082	-.162	.122	-.100	-.320	-.13	
20.	.178	-.153	-.005	-.163	.262	.024	-.310	-.131	
21.	.001	.029	.058	-.156	-.149	-.092	-.184	-.036	
22.	.122	.044	.056	-.146	.145	.067	-.259	-.026	
23.	.156	-.108	-.021	-.081	.288	.000	-.210	-.1	
27.	.136	-.116	.021	-.159	.170	.006	-.333*	.109	
24.	.087	-.039	.076	-.206	.063	-.023	-.312*	.130	

31.

Value	13	14	15	16	17	18	19	20	21	22	23	27	27
ables													
1.	-	-	-	-	-	-	-	-	-	-	-	-	-
2.	-	-	-	-	-	-	-	-	-	-	-	-	-
3.	-	-	-	-	-	-	-	-	-	-	-	-	-
4.	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	-	-	-	-	-	-	-	-	-	-	-	-	-
8.	-	-	-	-	-	-	-	-	-	-	-	-	-
9.	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	-	-	-	-	-	-	-	-	-	-	-	-	-
11.	-	-	-	-	-	-	-	-	-	-	-	-	-
12.	-	-	-	-	-	-	-	-	-	-	-	-	-
13.	1.00	-	-	-	-	-	-	-	-	-	-	-	-
14.	.557**	1.00	-	-	-	-	-	-	-	-	-	-	-
15.	.576**	.605**	1.00	-	-	-	-	-	-	-	-	-	-
16.	.549**	.527**	.802**	-	-	-	-	-	-	-	-	-	-
17.	.819**	.815**	.873**	1.00	-	-	-	-	-	-	-	-	-
18.	.321*	.360	.435	.440	1.00	-	-	-	-	-	-	-	-
19.	.038**	.605**	.326**	.325	.330**	1.00	-	-	-	-	-	-	-
20.	.375**	.705**	.601	.620	.622	.630**	1.00	-	-	-	-	-	-
21.	.359*	.596**	.511**	.602**	.623	.739**	.561**	.399	-	-	-	-	-
22.	.096	.332*	.347*	.504*	.523	.559**	.577**	.701**	1.00	-	-	-	-
23.	.364*	.375*	.399**	.521**	.630**	.661**	.705**	.797*	.847**	1.00	-	-	-
24.	.711**	.511**	.532**	.561**	.617**	.732**	.814**	.876**	.872**	.839**	1.00	-	-
25.	.469**	.600**	.555**	.628**	.675**	.869**	.909**	.931**	.797**	.902**	.915**	.399	-
26.	.489**	.609**	.373**	.631**	.663**	.783**	.838**	.856**	.731**	.824**	.865**	.921**	1.00

2.2 The table 3.1 can be divided into five segments for interpretation on the basis of the areas covered. The first segment covers intercorrelations in the area 1-6x1-6, 1- 5 being the intercorrelations between different areas of social cohesion while 6 representing the summated social cohesion score. An examination of this area of the intercorrelation matrix reveals quite high intercorrelations in all cells most of which are significant at .01 level. High correlations in row 6 represent contribution of each of the five areas to the total social cohesion score. High intercorrelations in the remaining part indicates overlap among different areas comprising social cohesion.

2.3 The next segment of the intercorrelation matrix (7-11, 25, 12) x (1-27) yields 49 intercorrelations. This is an important segment in the sense that it covers student teacher outcome variables of achievement. Rows 7-11 cover their scores in the five theory papers, row 25 covers total achievement in theory and row 12 indicates scores in practice teaching. Within this also the major concern of the study is for intercorrelations in the subsegment (7-11, 25, 12) x (1-6). These particular correlations are addressed to the objective 3.1.2 in the first chapter. An examination of the subsegment

reveals that the student teacher mean score in the paper on principles of Education (07) has significant correlations with the social cohesion area scores of IPA EGW ISDN and SCS at .01 level. It also has positive correlation with CC and EDRG without reaching significance level. Thus row 7 in the matrix reveals that student teacher achievement in the principles of Education is related to social cohesion obtaining in the teacher training institution covered in the study. In the case of student teacher achievement scores in Educational Psychology row 8 of the intercorrelation matrix reveals positive correlations with six social cohesion scores but none of them is significant. The same trend is discernible in the case of correlations between social cohesion scores and student teacher scores on principles of Teaching as is evident from a perusal of row 9 with the only exception that the correlation of student teacher scores in this paper are negatively correlated with closeness with the group (CC). Row 10 gives correlations between the mean social cohesion scores and student teacher achievement in Educational Evaluation and Counselling. The correlation between the mean student teacher achievement scores and mean scores on EGW are significant at .01 level and the student teacher

achievement in this paper has positive significant correlation with LSDM at .05 level. The remaining four correlations in row 10 are positive without reaching the significance level. Row 11 giving correlations between the six mean scores of social cohesion and student teacher achievement scores in the paper on the Problems of Primary Education are positive but not significant. The row with computer code 25 catalogues correlations between the student teacher total achievement in the five theory papers and six mean scores of social cohesion. The correlations between student teacher achievement and the social cohesion mean scores on IPA, EGW, ISDM and SCST are significant at .01 level the correlation between student teacher achievement mean score and EDRG are significant at .01 levels. Its correlation with CNG, however, is positive without reaching significance level. The correlations in row (25) indicate positive relationship between the social cohesion scores and student teacher achievement scores (theory papers combined together).

2.4 Row 12 of the intercorrelation matrix gives a set of correlations between student teacher mean score in Practice Teaching and the six mean scores of social cohesion. The correlations follow almost the same trend as row (25). The correlations between student teacher mean score on achievement with social cohesion

scores of EDRG and SCST are significant at .01 level and its correlation with IPA, EGW, CWG and LSDM are significant at .05 level. This implies that the student teachers tend to achieve higher in teacher training institutions with higher level of social cohesion and they tend to achieve less in institutions with low social cohesion.

2.5 The segment 13-27x1-6 gives intercorrelations between student teacher mean score on the five variables of adjustment, eight variables of attitudes and SES. This segment contains 100 correlations. None of the correlations is significant at .05 level. The correlations present a mix of positive as well as negative ones. This segment however, presents interesting reading, if examined closely.

2.6 Row 13 provides correlations between student teacher mean scores on adjustment to teaching and the six scores on social cohesion. Its correlation with CWG, IPA and SES are more than .2, of course, without reaching significance. The remaining three correlations are positive but below .2, obviously, they are not significant. This is the only row where all the six correlations are positive.

It indicates the tendency of better adjustment level towards teaching in institutions with higher level of social cohesion. In other words, student teacher adjustment to teaching increases with the corresponding increase in institutional social cohesion scores. The relationship between the student teacher adjustment to peers and social cohesion are mostly negative although they are not significant. The size of correlation is also small since all of them are below .1. The negative correlations may be due to mutual competitiveness reaching the level of jealousy in student teachers for securing good internal assessment. Row 15 reveals negative correlations without reaching significance between student teacher adjustment to teacher and social cohesion scores of the institutions, probably, due to the same reason as in the case of their adjustment to peers. The results in respect of the relationship between student teacher adjustment to institution and total adjustment mean scores and six measures of social cohesion are negligible and mostly in negative direction as revealed by row 16 and 26.

2.7 The intercorrelations in the segment from (10-14, 27) x (1-6) indicate correlations between social

cohesion and attitude of the student teachers. Most of the correlations are very small. The correlations between social cohesion scores on CWG, LSDM, SCST and student teacher attitudes towards teachers are positive but not significant. These correlations indicate a tendency that student teachers attitudes to teachers is related to social cohesion in the institution.

2.8 There are a number of concomitant correlations in the rest of the intercorrelation matrix. A perusal of these correlations reveal that student teacher achievement in Educational psychology and socio-economic status were found to be significant at .05 level. The remaining correlations between student teacher academic achievement in different papers and various scores of their adjustment and attitude were not found to be significant. However, the scores on practice teaching have significant negative correlation with their adjustment to teachers, total adjustment scores, attitude towards teaching profession and total attitudes scores while the correlations are positive and significant with socio. economic status. The negative correlations in student teacher achievement in practice teaching and their adjustment and

attitude may be due to the feeling of competition and jealousy developed through internal assessment as pointed out earlier. The student teacher adjustment and attitude have been found to be significantly related as is indicated by the high correlations most of which are significant at .01 level.

3-0. Results: Inferential

3.1 The second mode of analysis of the data involves formation of groups of twelve institutions each having high and low social cohesion. The institutions were ranked on the total social cohesion score for grouping. The major purpose of this analysis was to see if the two groups differ significantly on student teacher outcomes in terms of their achievement, adjustment and attitudes. Tables 3.3-3.5 provide results of the analysis. Table 3.3 provides results in respect of student teacher achievement in theory papers 1-5, total scores in the five papers and achievement scores on practice teaching.

Table 3.3

Student Teacher Achievement in Teacher Training
Institutions with High and Low Social Cohesion.

Variable	N	Group	Means	S.D.	t	Significance
1 PE	12	H	45.47	2.48	1.7633	.05
	12	L	43.16	3.80		
2 EP	12	H	45.63	4.97	1.1283	NS
	12	L	43.09	6.01		
3 PT	12	H	43.56	5.27	0.0075	NS
	12	L	43.54	6.44		
4 EEC	12	H	45.16	6.62	0.8439	NS
	12	L	43.18	4.73		
5 PPE	12	H	46.22	6.00	1.1536	NS
	12	L	43.44	5.84		
6 ATT	12	H	218.69	20.10	2.3662	.05
	12	L	202.22	13.32		
7 PTT	12	H	11.13	1.45	.7556	NS

3.2 The table reveals that the two groups of institutions formed on their social cohesion levels differ significantly at .05 level in respect of student teacher achievement in Principles of Education and total scores of all five papers. The results in respect of student teacher achievement in the remaining theory papers and practice teaching do not turn out to be significant. The results

indicate a tendency as was revealed in the correlations. Only further research can provide more insight into the problem. To that extent the null hypothesis H_{02} is partly rejected.

3.3 The table 3.4 provides mean standard deviations, t values and significance level in respect of 5 student teacher adjustment scores of teacher training institutions with high and low social cohesion.

Table 3.4

Student Teacher Adjustment in Teacher Training Institutions with High and Low Social Cohesion.

Variable	Group	N	Means	S.D.	t	Significance
1 ADI	L	12	10.74	1.05	0.0711	NS
	H	12	16.35	1.10		
2 ADI	L	12	16.31	1.37	1.4860	NS
	H	12	12.44	1.13		
3 ADI	L	12	13.04	0.82	0.8983	NS
	H	12	13.30	1.06		
4 ADI	L	12	13.64	.81	0.2868	NS
	H	12	32.69	4.99		
5 ADI	L	12	32.00	6.64	0.2141	NS
	H	12	59.00	6.75		

As is evident from the table, none of the 5 t-values are significant even at .05 level. The results are in conformity with non significant intercorrelation between the measures of social cohesion and student teacher adjustment.

3.4 Table 3.5 presents results in respect of different measures of student teacher attitudes in teacher training institutions with high and low social cohesion. The first six variables represent the six areas of attitudes comprising the Ahluwalia Attitude Inventory, the seventh variable is the total attitude scores on this inventory and variable 5 represents student teacher attitudes towards the institution. This score has not been added to the total attitude scores because it was measured by a different tool.

Table 3.5

Student Teacher Attitude in Teacher Training
Institutions with High and Low Social Cohesion

Variable	Group	N	Mean	S.D.	t	Significance
1. ATP	H	12	37.17	5.88	0.0189	NS
	L	12	37.13	2.52		
2. AGT	H	12	40.95	4.00	0.5063	NS
	L	12	41.65	2.66		
3. ACCP	H	12	40.58	5.28	0.0839	NS
	L	12	40.72	2.39		
4. AEP	H	12	34.52	5.16	0.4311	NS
	L	12	33.80	2.54		
5. AP	H	12	36.66	5.58	0.1202	NS
	L	12	36.88	3.14		
6. ATR	H	12	226.06	12.88	1.7660	.05
	L	12	216.41	13.86		
7. AIS	H	12	53.21	4.21	0.3315	NS
	L	12	53.73	3.46		
8. ATI	H	12	248.42	30.80	0.0395	NS
	L	12	248.82	12.98		

3.5 An examination of the table reveals that only student teacher adjustment towards teacher is the only variable on which the two groups of teacher training institutions differ significantly. The t- value is significant at .05 level. The two groups of teacher training institutions do not differ significantly on any other of the eight variables of student teacher attitudes. The results confirm the trends discerned in the intercorrelation matrix.

4.0 Results: Prediction

4.1 Another aspect of analysis of the data refers to the prediction of student teacher achievement through social cohesion scores as well as their achievement and adjustment scores. Prediction of achievement has been taken up separately for the student teacher total scores in papers on the Principles of Education, Educational Psychology, Principle of Teaching, Educational Evaluation and Counselling and Problems of primary Education. Practice teaching scores have not been included in these criterion scores. In the predictor variables total scores on social cohesion, student teacher adjustment and attitude have been excluded. Prediction of student teachers scores on practice teaching has been taken up separately. Reverse

prediction has also been carried out. Here social cohesion total score constitutes the criterion variable and student teacher achievement (five theory papers and practical teaching scores), adjustment and achievement constitute predictor variables. The results have been provided in table 3.6 to 3.8.

4.2 Table 3.6 gives multiple R, multiple R^2 , increment R, increment R^2 , variance explained and F values emerging from the stepwise regression analysis for the prediction of total theory achievement scores of student teachers.

Table 3.6
Stepwise Regression Analysis with Achievement as the
Criterion Variable

S.No	Variable	R	Increment R	R ²	Increment R ²	% of Variance	F
1	2	3	4	5	6	7	8
1	ATR	.2884	-	.0831	-	8.31	2.81 NS
2	AEP	.5465	.2582	.2986	.2155	29.86	6.32 **
3	ADTR	.6115	.0650	.3739	.0753	37.39	5.77 **
4	ACCP	.6829	.0714	.4663	.0924	46.63	6.12 **
5	ADE	.7168	.0339	.5138	.0475	51.38	5.71 **
6	ADP	.7610	.0442	.5791	.0653	57.91	5.96 **
7	IPA	.7871	.0261	.6196	.0405	61.96	5.82 **
8	ECW	.8274	.0403	.6546	.0650	65.46	6.51 **

* Significant at 0.01 level
** Significant at 0.05 level

-2-

1	2	3	4	5	6	7	8	
9	ATT	.8374	.0100	.7013	.0167	70.13	6.00	**
10	ATP	.8492	.0118	.7212	.0199	72.12	5.69	**
11	ACT	.8640	.0148	.7465	.0253	74.65	5.62	**
12	CWG	.8708	.0068	.7584	.0119	75.84	5.23	**
13	SFS	.8767	.0059	.7686	.0102	76.86	4.86	**
14	VOT	.8857	.0120	.7899	.0213	78.99	4.83	**
15	AP	.8902	.0015	.7924	.0025	79.24	4.33	NS
16	EDRG	.8905	.0003	.7931	.0007	79.31	3.83	NS

It will be seen in the table 3.6 that the first predictor of student teacher achievement in theory turns out to be their attitude towards teachers which explains 8.3% of the variance in student teacher achievement. Student teacher attitude towards educational process contributes 21.55% to the variance explained. Other variables relating to student teacher attitudes include their attitude towards child centred practices explaining a little over nine percent of the variance, attitude towards institutions contributing 1.6% to the variance explained, and attitude towards teaching profession explaining about 2% of the variance. Student teacher attitude towards classroom teaching is the succeeding predictor

explaining 2.53% of the variance explained. The variance explained by the student teacher attitude towards pupils is negligibly small. The total variance explained by the predictors relating to student teacher attitudes comes out at 36%. The next set of predictors of student teacher achievement in theory comprise a set of variables relating to student teacher adjustment. Student teacher adjustment towards teachers turns out to be the third variable explaining 7.53% of the variance explained. It is followed by adjustment to teaching which is the fifth predictor explaining 4.75% of the variance. Student teachers adjustment towards institution explains 3.13% of the variance. Thus student teacher adjustment variables explain a total of 14.41% of the variance explained.

4.4 The interpersonal attraction, the component of the social cohesion, turns out to be the seventh predictor explaining 4% of the variance explained which is followed by the social cohesion component of evaluation of the group as a whole by the members explaining 6.5% of the variance. Closeness with the group turns out to be the twelfth predictor contributing 1.19% to the variation explained. Desire to remain in the group contributes negligibly to the variance explained.

e in student teacher achievement in theory
y social cohesion components comes to 1 1.69%
cohesion components fall behind the student
ustment and attitude variables in respect
ance explained. However they do have predictive
gh not very large for predicting student
ievement in theory.

ble also reveals that the seventeen variables
the table are able to explain 79.42% of
e in student teacher achievement which
t these variables account for about four-
e variance explained while about one-fifth
ance still remains unexplained. Other
ccounting for the unexplained variance will
searched.

cohesion comp-onents are the last to appear
r variables as well as in the amount of
plained in student teacher adjustment. The
lie in probably stereotyped lecture coverage
ry papers in these institutions resulting
adequate perception of this component of the
viable of social cohesion and consequent
ence of this factor. Micro studies can
on this problem.

4.6 Table 3.7 summarises results of stepwise regression analysis with teaching practice score as the criterion variable and social cohesion component scores, student teacher attitude component scores, student teacher adjustment scores and their socio-economic status scores as the predictor variables. The table gives multiple R, increment R, multiple R^2 , increment multiple R^2 percentage of variance explained and corresponding F-Values,

contd.

Table 3.7

STEPWISE REGRESSION - ANALYSIS WITH TEACHING
PRACTICE AS THE CRITERION VARIABLE

S.No.	Name	R	Incre- ment R	R^2	Incre- ment R^2	Percentage of variance	F.
1.	EGW	.5652		.3194		31.94	14.55 *
2.	CWG	.6423	.0771	.4125	.0931	41.25	10.53 *
3.	IP A	.6855	.0432	.4700	.0575	47.00	8.53 *
4.	SES	.7157	.0302	.5123	.0423	51.23	7.53 **
5.	ADTR	.7411	.0254	.5493	.0370	54.93	6.58 **
6.	ADI	.7679	.0268	.5897	.0404	58.97	6.23 **
7.	EDRG	.7758	.0079	.6020	.0123	60.20	5.40 **
8.	AEP	.7832	.0074	.6134	.0114	61.34	4.76 **
9.	ADI	.7917	.0085	.6268	.0134	62.68	4.29 **
10.	ADP	.7918	.0001	.6370	.0102	63.70	3.86 NS
11.	ATR	.8018	.0100	.6430	.0060	64.30	3.44 NS
12.	ATI	.8120	.0102	.6594	.0164	65.94	3.23 NS
13.	ACT	.8147	.0027	.6638	.0044	66.38	2.89 NS
14.	AP	.8156	.0009	.6653	.0015	66.53	2.56 NS
15.	LSDM	.8168	.0012	.6673	.0020	66.73	2.27 NS
16.	ACCP	.8170	.0002	.6675	.0002	66.75	2.01 NS

4.7 An examination of the table reveals that the first three predictors turn out to be the social cohesion

components of evaluation of the group as a whole (EGW), closeness with the group (CWG) and inter personal attraction (IPA) explaining the percentage variance to the tune of 31.94, 9.31 and 5.75 respectively. The social cohesion component of the expressed desire to remain in the group turns out to be the seventh predictor explaining 1.23 percent of the variance. The contribution of the social cohesion component of leadership style and decision making contributes negligibly to the pool of the variance explained. The social cohesion components explain a total of 48.23 percent of the variance which comes to be a little over three-fourth of the total variance explained by the sixteen variables covered in the table. Obviously, when this table is read in conjunction with table 3.6 it presents a contrast in the sense that social cohesion was the last in explaining variance in student teacher achievement in theory, while it has emerged as first in the case of practice teaching attainment. The reversal of the trend might be due to the personal contact student teachers establish with the teacher educators. Another reason can be that evaluation of the student teaching is itself a team effort. A group of teacher educators carry out internal evaluation while a team of internal

and external examiners carry out external evaluation. It implies that social cohesion operates more effectively in student teaching rather than transaction of theory courses.

4.8 Socio economic status turns out to be the fourth predictor explaining 4.23 percent of the variance explained. Compared with prediction of student achievement in theory it is a better predictor variable in the case of student teacher attainment in practice teaching. Student teacher adjustment components of adjustment towards teacher or adjustment towards teaching constitute the next two predictors explaining 3.70 and 4 percent respectively. The student teacher adjustment towards the institution and adjustment towards peers appear at number nine and ten as predictors explaining 1.14 percent and 1.34 percent respectively. These components put together explain a total variance of 10.18 percent of the variance explained.

4.9 The student teacher attitude components of attitude towards educational process, attitude towards teachers, attitude towards institution, attitude towards classroom teaching, attitude towards pupil and attitude towards child centred practices put together explain the total variance of 2.85 percent of the variance explained.

All the sixteen variables put together have been able to explain a total variance of 66.75 percent of the variance explained. The remaining 33.25 percent of the variance remains yet to be explained. Variables explaining the remaining variance will have to be identified through further research,

4.10 Table 3.8 provides the results of reverse prediction emerging from the stepwise regression analysis of summated social cohesion score as the criterion variable and student teacher achievement in individual theory papers, adjustment and attitudes. The table gives eleven variables alongwith multiple R, increment R, multiple R^2 , increment multiple R^2 and the percentage of variance explained and corresponding F-value.

Table 3.8

Stepwise Regression Analysis of Social Cohesion Score
as Criterion

S.No	Variables	R	Increment R	R^2	Increment R^2	% of V. Explained	F
1	PTT	.4455	-	.1985	-	19.85	7.68 *
2	ADT	.5918	.1463	.3503	.1518	35.03	8.09 *
3	EEC	.6675	.0757	.4455	.0952	44.55	7.77 *
4	ADTR	.7142	.0467	.5101	.0646	51.01	7.29 **
5	ATP	.7345	.0203	.5395	.0294	53.95	6.33 **
6	PPE	.7465	.0120	.5572	.0177	55.72	5.46 **
7	ADI	.7632	.0167	.5825	.0253	58.25	4.90 **
8	EP	.7818	.0186	.6113	.0288	61.13	4.72 **
9	ADP	.7890	.0072	.6225	.0112	62.25	4.21 NS
10	ATI	.7912	.0022	.6260	.0035	62.60	3.68 NS
11	PT	.7923	.0011	.6277	.0017	62.77	3.22 NS

It can be seen in the table that the student teacher score in practice teaching turns out to be the first predictor explaining 19.85% of the variance in social cohesion scores in the elementary teacher training institutions. Student teachers scores in Educational Evaluation and Counselling, Problems of Primary Education, Educational Psychology and Principles of Teaching appear

at number three, six, eight and eleven as predictor variables explaining 9.52%, 1.77%, 2.88% and .17% of the variance in social cohesion. The total variance explained through student teacher achievement in theory papers come out to be 14.34% of the variance explained. Student teacher adjustment of teaching turns out to be the second predictor explaining 15.18% of the variance. Student teacher adjustment to teachers, institution and adjustment to peers turn out to be fourth, sixth and ninth predictors explaining 6.46, 2.53 and 1.12% of the variance explained. The four student teacher adjustment components put together explain 25.29% of the variance. Adjustment towards institution is only the adjustment predictor variable appearing in the table but its contribution to the variance explained is a meager (35 percent). To total variance explained by the eleven variables come to 62.77% which leaves about one third of the variance unexplained.

4.11 A perusal of the three tables relating to regression analysis (3.6 - 3.8) reveals a few important points. Firstly social cohesion obtaining in the teacher training institutions has low predictive value for student teacher achievement in theory. Secondly, the social cohesion has higher predictive value for the prediction

of student teacher achievement in practice teaching. The two findings indicate that in theory courses social cohesion effect is not reflected to the extent that is expected. This may be probably due to single channel dominant lecturing approach followed in the teacher training institutions to cover the theory courses. The interpersonal contact during practice teaching might be responsible for the reflection of better reception of social cohesion prevalent in the teacher training institutions as indicated by the higher predictive value of social cohesion on practice teaching.

RESULTS

1.1 It may be recalled that the study purposed to investigate into the relationship between social cohesion obtaining in elementary teacher training institutions and student teacher outcomes in terms of their achievement, adjustment, and attitude as measures of institutional efficiency. The study was conducted in 33 elementary teacher training institutions of Uttar Pradesh. Social Cohesion Assessment Inventory was used to measure social cohesion in the institutions, while student teacher marks obtained in different theory papers as well as practice teaching examination conducted by the Board were considered as measures of their achievement. Their adjustment and attitudes were measured through the Student Teacher Assessment Inventory developed by Dutta and Teacher Attitude Inventory developed by Khurana. The co-relational, inferential and prediction statistics were used for analysis and interpretation of the data. Product moment correlations between different variables of social cohesion, student teacher achievement, adjustment and attitude scores were computed. The institutions were also classified into two groups with high and low social cohesion and t-test was employed to test the significance of

difference between means of student teacher outcome variables. Stepwise regression analysis was employed to predict student teacher achievement in theory as well as practice teaching. Social cohesion was also predicted from student teacher outcomes as well as their socioeconomic status for obtaining concomitant results.

1.2 Social cohesion variables have found to be having significant positive correlation with academic achievement variables relating to theory as well as practice teaching. While their relationship with attitude and adjustment are mostly nonsignificant but in positive direction with a few exceptions. The correlational results are also supported by inferential results. Social cohesion has turned out to be a strong predictor of student teacher achievement in practice teaching, while it does predict student teacher academic achievement though the predictability is not high. Strangely enough, social cohesion should influence affective student teacher outcomes of attitude and adjustment. It is future, research which is going to clarify the apparent contradiction. However, implication of the study can be considered with a caution because of the nonavailability of supporting or contradictory results due to the paucity of research in this area in educational setting.

1.3. As a context variable in research on teaching social cohesion appears to be influencing student teacher achievement in practice teaching. This may be due to the higher level of interaction between the teacher educators and student teachers. The interaction initiates from planning for teaching through feedback to further practice. Is it possible that interactive teaching in the classroom also influences student teacher achievement in theory as well? It will be worthwhile to study social cohesion in relation to interaction level in classrooms, ultimately relating it to product variables.

1.4 The present study is correlational and exploratory in nature. It has pointed to some trends which need to be investigated further through experimental studies. The extent of variation in the social cohesion level in different institutions being low, it will be worthwhile to study its effect through simulating levels of social cohesion and its effect on teaching process as well as product variables.

1.5 It is assumed in the study that social cohesion is perceived per se by the students, influences their learning behaviour, which in turn, influences their achievement. It is also assumed that the social cohesion

influences teacher classroom behaviour as well. It will be worthwhile to carry out study with social cohesion as a context variable, the process variables and product variables simultaneously to test these assumptions. This area of research appears to be potential for improving teacher effectiveness, particularly in view of the experience with this concept in industrial organizations. It has also shown its effectiveness in defence organizations. A programme of interrelated study involving different variables in the context of teaching would provide useful information for planning and transacting effective teaching.

1.6 The study is exploratory in nature. It has raised a number of questions rather than answering even those which it purported to answer. But there is no occasion for pessimism. The study is concluded with the hope that it will attract more research attention in the context of educational setting than it has done so far. It is hoped that more researchers would enrich the area with their ingenuity and creative research they are likely to be engaged in.

R E F E R E N C E S

- Babu (1976) "A Study of Cohesiveness in Relation to Forces of Attraction for Groups of Teaching Staff", Ph.D. Education, Del. V.
- Brandstatter, H. (1978) Social Emotions in Discussion Groups. In H. Brandstatter, J.H. Davis, of H. Schuler (eds), Dynamics of Group Decisions. Beverly Hills, Calif : Sage Publications.
- Buch, MB (1974) A Survey of Research in Education. Centre of Advance Study in Education, Baroda.
- Buch, MB (1979) Second Survey of Research in Education. Baroda.
- Cartwright D and Zander, A (1968) Group Dynamics : New York : Harper & Row.
- Dhaka, K (1981) A Study of Social Cohesion in the Teacher Education Colleges of Haryana and its Relationship with Attitude of Student Teachers. Unpublished M.Ed. Dissertation Maharshi Dayanand University, Rohtak.
- English, HB & English AC (1958) A Comprehensive Dictionary of Psychological and Psychoanalytical terms. New York, David McKay.
- Exline, RV (1957) "Group Climate as a Factor in the Relevance and Accuracy of Social Perception". Journal of Abnormal and Social Psychology, 55, 382, 358.
- Festinger, L(1954) A Theory of Social Comparison Processes. Human Relations, 7, 117-140.
- Fox, JB and Scott, JF (1943) Absenteeism : Management's Problem Boston : Harvard University Division of Research.
- French, JRP (or), (1941) The disruption and Cohesion of Groups. Journal of Abnormal and Social Psychology, 36, 361, 377.

- Gergen, KJ &
Gergen, MM (1981) Social Psychology, New York, Harcourt
Brace Javanovich.
- Getzel, JW &
Thelen, HA The classroom group as a unique
social system. In NSSE year book,
The Dynamics of Instructional Groups.
The University of Chicago Press,
- Goodacre, IM
(1951) The use of Sociometric test as a
Predictor of combat unit effective-
ness Sociometry, 14, 148, 152.
- Gould, J &
Kalb, WL (1964) a Dictionary of social sciences.
UNESCO
- Gross, E (1954) Primary Functions of the Small Group
American Journal of Sociology, 60, 24-30.
- Haythorn, WW (1953) The influence of individual members
on the characteristics of small
groups. Journal of Abnormal and
Social Psychology, 48, 276-284.
- Husband, RW (1940) Cooperative versus solitary problem
solutions. Journal of Social Psycho-
logy, 11, 405, 407.
- Jangira, NK &
Yadav, Sushma. Assessment of Social Cohesion, Interna-
tional Journal of Behavioural
Sciences, Vol.I No.1, 1981.
- Janis. IL (1968) Group identification under conditions
of external danger. In D. Cartwright
& A. Zander (eds.) Group Dynamics:
Research and Theory, New York,
Harper & Row.
- Julian JW
Bishop DW &
Fiedler, FE Quasi, therapeutic effects of inter-
group competition, Journal of persona-
lity and Social Psychology, 3, 321, 327.
- Lott, AJ &
Lott, BE (1961) Group Cohesiveness, Communication Level
and Conformity. Journal of Abnormal
and Social Psychology, 62, 408-412.

- Marquis, DG,
Guetzkow H &
Heyns, RW (1951) A Social Psychological study of the
decision-making conference. In H.
Guetzkow (ed) Groups, Leadership,
and Men: Research in Human Relations.
Pittsburgh: Carnegie Press.
- Pepitone, A
&
Reichling, G (1955) Group Cohesiveness and the expression
of hostility. Human Relations.
8, 327-337.
- Sacks, EL
(1952) Intelligence scores as a function of
experimentally established social
relationships between child and ex-
aminer. Journal of Abnormal and
Social Psychology 47, 154-161.
- Schuler, H
&
Peltzer V.
(1978) Friendly versus unfriendly non-verbal
behavior: The effects on group
decision-making preferences. III.
Bronckhorst, L. Ovis, M. Schuler.
(edu.) Dynamics of group decisions.
Beverly Hills, Calif: Sage Publications.
- Seashore, SE
(1954) Group Cohesiveness in the industrial
Work Group. Ann Arbor, Mich: Insti-
tute for Social Research.
- Sharma, ML (1979) Schools in Context, Ambala: The
Indian Publications.
- Sills LD (1968) International Encyclopedia of the
Social Sciences. Groun Gollier
and Macmillan Inc.
- Taylor, FW (1911) The Principles of Scientific Manage-
ment. New York: Harper & Row.

अध्यापक शिक्षा विभाग
राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
श्री अरविन्द मार्ग, नई दिल्ली-110016

सांसाजिक संसखित निर्धारण तालिका
(S C A I-Social Cohesion Assessment Inventory)

- एन०के० जेगीरा

आर०के० चोपड़ा

निर्देश

प्रस्तुत प्रश्नावली अध्यापक प्रशिक्षण विद्यालयों में कार्य करने वाले अध्यापक शिक्षकों की सांसाजिक संसखित (Social Cohesion) के विषय में है। इसमें दिये गये कथन अध्यापक शिक्षकों के आपसी सम्बन्धों, उनके द्वारा अध्यापक शिक्षक-समूह का प्रत्यक्षन, उनमें आपसी निकटता, उनकी वर्तमान विद्यालय के अध्यापक शिक्षक-समूह में रहने की इच्छा, प्रधानाध्यापक का कार्य करवाने का ढंग तथा निर्णय लेने की क्रिया में अध्यापकों के अनुभवों के विषय में है। आप इन कथनों को 'अच्छे' या 'बुरे' व्यवहार की दृष्टि से प्रत्यक्षन न करें, अपितु इस दृष्टि से अपनी राय दें कि अमुक कथन आपके साक्षी अध्यापकों के आपसी व्यवहार व ताल-मेल को किस सीमा तक दर्शाता है।

प्रत्येक पृष्ठ के ऊपरी भाग पर दिये गये कथनों के लिए तीन सम्भावित परिस्थितियाँ (बहुत बार ऐसा ही अनुभव होता है, कभी-कभी ऐसा अनुभव होता है, कभी भी ऐसा अनुभव नहीं होता) दिये गये हैं। आपके साक्षियों का आपसी व्यवहार इन परिस्थितियों में से जिस परिस्थिति के निकट है उसके सामने बने खाने में सही का चिन्ह () लगाइए। सत्य का कोई प्रतिबन्ध नहीं है। फिर भी शीघ्रता से अपनी राय दें। विश्वास कीजिए कि आपके उत्तर गोपनीय रहे जायेंगे तथा उनका प्रयोग केवल अनुसंधान के लिए ही किया जायेगा।

अध्यापक का नाम

.....

विद्यालय का नाम

.....

स्थान

.....

अध्यापक का व्यक्तिगत विवरण

लिंग -

() (क) पुरुष

() (ख) स्त्री

आयु -

() (क) 21 - 30

() (ख) 31 - 40

() (ग) 41 - 50

() (घ) 51 - 60

शैक्षिक योग्यता -

() (क) बी०ए०/बी०एस-सी०

() (ख) एम०ए०/एम०एस-सी०

(ग) अन्य

व्यवसायिक योग्यता -

() (क) शिक्षण में डिप्लोमा

() (ख) बी० एड०

() (ग) एम० एड०

() (घ) पी-एच० डी०

(च) अन्य

शिक्षण अनुभव -

() (क) 1 - 5 वर्ष () (ख) 6 - 10 वर्ष

() (ग) 11 - 15 वर्ष () (घ) 16 - 20 वर्ष () (ङ) 21 - 25

() (च) 26 - 30 वर्ष () (छ) 30 वर्ष से अधिक

स्थान	बहुत बार ऐसा ही अनुभव होता है	कभी-कभी ऐसा ऐसा अनुभव होता है	कभी भी ऐसा अनुभव नहीं होता
1 - इस विद्यालय से गुम्मे लगाव सा हो गया है ।	()	()	()
2 - मैं अपने साथी अध्यापकों के साथ विद्यालय के उद्देश्यों व कार्यों को पूरा करने के लिए पूर्णतः संगठित हूँ ।	()	()	()
3 - मैं अपने साथी अध्यापकों के साथ आनन्द का अनुभव करता हूँ ।	()	()	()
4 - एक सप्ताह से अधिक बीमार पड़ जाने पर मेरे साथी गुम्मे मिलने मेरे घर आते हैं ।	()	()	()
5 - मैं इस विद्यालय के कार्य सम्बन्धी वातावरण से सन्तुष्ट हूँ ।	()	()	()
6 - अध्यापन कार्य में मेरी योग्यता का उपयोग नहीं हो रहा है ।	()	()	()
7 - मैं अपना अधिक से अधिक खाली समय यहाँ के अध्यापकों के साथ ही बिताना चाहता हूँ ।	()	()	()
8 - प्रधानाध्यापक अध्यापकों के छोटे-मोटे आपसी मतभेदों को दूर करने का प्रयत्न करते हैं ।	()	()	()
9 - मेरी बदली किसी अन्य प्रशिक्षण विद्यालय में हो जाये इस बात को मेरे अधिकांश साथी अध्यापक पसंद नहीं करेंगे	()	()	()

कथन	यहूत वार ऐसा ही अनुभव होता है	कभी-कभी ऐसा ऐसा अनुभव होता है	कभी भी ऐसा अनुभव नहीं होता
-----	-------------------------------------	-------------------------------------	----------------------------------

- 10- गैर विद्यालय के अध्यापक अन्य
विद्यालयों के अध्यापकों की अपेक्षा
मेहनत व लगन से काम करते हैं। () () ()
- 11- शिक्षण के अतिरिक्त विद्यालय के अन्य
कार्यक्रमों में भी रुचि लेता हूँ। () () ()
- 12- मेरे अधीकृत साक्षी विश्वसनीय हैं। () () ()
- 13- प्रधानाध्यापक उन महत्वपूर्ण विषयों पर
जिनका सम्बन्ध अध्यापकों से हो, निर्णय
लेने के लिये अध्यापकों की राय लेते हैं। () () ()
- 14- मेरे अधिकतर साक्षी मेरे पढ़ाने के ढंग
की प्रशंसा करते हैं। () () ()
- 15- मेरे साक्षी अध्यापक मुझसे किसी बात में
भिन्नता रखते हुए भी ऐसी बात शांति-
पूर्वक सुनते हैं। () () ()
- 16- स्टाफ मीटिंग में मेरे सुझावों पर ध्यान
दिवा जाता है। () () ()
- 17- इस विद्यालय के अध्यापक मुझे इतने
अच्छे लगते हैं कि मैं उनको छोड़कर कहीं
जाना नहीं चाहता हूँ। () () ()
- 18- विद्यालय में कक्षा के कार्य नियमन संबंधी
समस्त निर्णय अध्यापक ही लेते हैं। () () ()
- 19- अपनी जिम्मेदारियों के कारण मैं अपने
साथियों की अधिक मदद नहीं कर पाता हूँ। () () ()
- 20- अन्य प्रशिक्षण विद्यालयों की अपेक्षा यहाँ के
अध्यापकों का दृष्टिकोण अधिक रचनात्मक है। () () ()

कथन	बहुत बार ऐसा ही अनुभव होता है	कभी-कभी ऐसा अनुभव होता है	कभी भी ऐसा अनुभव नहीं होता
-----	-------------------------------------	---------------------------------	----------------------------------

21- राष्ट्रिय सहकारी क्रियाओं (Co-curricular activities) का आयोजन सब

अध्यापक मिल जुल कर करते हैं।

()

()

()

22- यदि इतने ही वेतन में मुझे कोई अन्य

नौकरी मिल जाये तो मैं यह पद स्वीकार
कर लूँगा।

()

()

()

23- प्रधानाध्यापक अध्यापकों की भलाई के

लिए प्रयत्नशील रहते हैं।

()

()

()

24- मुझे इस विद्यालय के अधिकांश अध्यापकों

को सामान्य व्यवहार अच्छा लगता है।

()

()

()

25- मेरे अधिकांश साथी अन्य प्रशिक्षण

विद्यालयों के अध्यापकों की अपेक्षा नवीन

शैक्षणिक विचारधाराओं से अधिक परिचित हैं।

()

()

()

26- मैं अपनी व्यक्तिगत समस्याओं की चर्चा

आस-पास के किसी साथी अध्यापक से
करता हूँ।

()

()

()

27- यदि मुझे किसी अन्य शिक्षण प्रशिक्षण

विद्यालय में बदल दिया जाये तो मैं

वर्तमान विद्यालय में ही रहने का प्रयत्न
करूँगा।

()

()

()

28- इस विद्यालय में केवल प्रधानाध्यापक

की ही चलती है।

()

()

()

29- मेरे अधिकांश साथी अध्यापक एक दूसरे की

भावनाओं का आदर करते हैं।

()

()

()

कथन	बहुत बार ऐसा ही अनुभव होता है	कभी-कभी ऐसा अनुभव होता है	कभी भी ऐसा अनुभव नहीं होता
30- मेरे विद्यार्थ्य मे नये-नये शैक्षणिक प्रयोग करने के अपसर अन्य विद्यार्थ्यों की अपेक्षा अधिक मिलते है ।	()	()	()
31- खाली समय मे रफ़्तार होने के समय अध्यापको मे काफी हंसी मजाक होता है ।	()	()	()
32- मेरे साथी अध्यापक मेरे हितों का ध्यान नहीं रखते है ।	()	()	()
33- शिक्षण कार्य मे प्रयोग के लिए सहायक सामग्री आसानी से प्राप्त हो जाती है ।	()	()	()
34- मुझे अपने अधिष्ठाता साथियों की अभिरुचियों (Hobbies) पसंद है ।	()	()	()
35- मेरे साथी अध्यापको मे अन्य विद्यार्थ्यों के अध्यापको की अपेक्षा अधिक मिलजोल है ।	()	()	()
36- मेरे साथी अध्यापक आपस मे सामाजिक निकटता अनुभव करते है ।	()	()	()
37- मेरे साथियों के बीच एक ऐसा सामाजिक वातावरण है कि मे स्वयं कोई स्वतन्त्र कार्य नहीं कर सकता ।	()	()	()
38- मेरे साथी अध्यापक शैक्षणिक दृष्टि से अधिक योग्य है ।	()	()	()
39- मेरे साथी एक दूसरे की पारिवारिक पृष्ठभूमि (Family Background) को जानते है ।	()	()	()
40- किसी महत्वपूर्ण विषय पर निर्णय लेने से पहले मेरे साथी मेरी राय लेते है ।	()	()	()

स्थान	बहुत बार ऐसा ही अनुभव होता है	कभी-कभी ऐसा अनुभव होता है	कभी भी ऐसा अनुभव नहीं होता
41- गैर धनिष्ठता मित्र इस विद्यालय के अध्यापकों से है।	()	()	()
42- गैर विद्यालय के अध्यापक किसी विषय पर निर्धारित पाठ्य को ही निर्णय ले लेते हैं।	()	()	()
43- विद्यालय के अधिकतर साथियों के साथ गैर सम्बन्ध मित्रता पूर्ण है।	()	()	()
44- इस विद्यालय में अध्यापन कार्य करते हुए गुरु अपनी योग्यता को बढ़ाने का पूर्ण अवसर मिलता है।	()	()	()
45- प्रधानाध्यापक अध्यापकों की सहायता नियमों से हटकर भी कर देते हैं।	()	()	()
46- इस विद्यालय के अध्यापकों का एक समूह, दूसरे समूह का विरोध करता है।	()	()	()
47- इस विद्यालय में किसी भी विषय पर रूढ़िगत होना असम्भव है।	()	()	()
48- इस विद्यालय में अध्यापकों को किसी भी कार्य को करने के लिए प्रधानाध्यापक की अनुमति लेना आवश्यक है।	()	()	()
49- विद्यालय के महत्वपूर्ण और लाभदायक कार्यों के वितरण में पक्षपात किया जाता है।	()	()	()
50- गैर अधिकांश साथी गुरु इतना सहयोग नहीं देते जितना कि उन्हें देना चाहिये।	()	()	()